

AMENDMENTS TO THE CLAIMS**10/510933**

DT04 Rec'd PCT/PTO 0 8 OCT 2004

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims

1-20. (Cancelled).

21. (New) A method in a mobile telecommunication network for providing a first radio network controlling unit with positioning information for a mobile terminal located within a cell and served by a radio base station covering said cell, the cell being identifiable by means of a cell Geographical Area Information (GAI), the method comprising the steps of:

transmitting a cell GAI, which is associated with a portion of the cell wherein the mobile terminal is located, from a second radio network controlling unit that controls the resources of said radio base station to the first radio network controlling unit that controls the connection of said radio base station to the mobile station, wherein the cell portion is covered by one antenna beam transmitted from said radio base station, whereby the cell portion is identifiable by identification of the antenna beam, wherein each antenna beam covers a respective cell portion and is distinguished by means of a phase reference provided by a pilot channel or by a downlink dedicated physical channel comprising dedicated pilots.

22. (New) The method according to claim 21, wherein the pilot channel is the Secondary Common Pilot Channel (S-CPICH).

23. (New) The method according to claim 21, wherein the cell portion covered by the antenna beam is determined by location points describing the geographical coordinates of said antenna beam.

24. (New) The method according to claim 21, wherein the cell portion consists of an area that extends from the Radio Base Station to the cell border within a detected angle of arrival of signals from the mobile terminal.

25. (New) The method according to claim 21, wherein the mobile telecommunication network is a UMTS network and the first radio network controlling unit is a first Radio Network Controller, RNC, and the second radio network controlling unit is a second Radio Network Controller, RNC.

26. (New) The method according to claim 25, wherein the first RNC is a serving RNC and the second RNC is a drift RNC.

27. (New) The method according to claim 26, wherein the drift RNC transmits the Cell Portion GAI to the serving RNC over the Iur interface.

28. (New) The method according to claim 27, wherein the Cell Portion GAI is an information element of the RNSAP-protocol.

29. (New) A resource controlling radio network controlling unit in a mobile telecommunication network adapted to provide a connection controlling radio network controlling unit with positioning information for a mobile terminal located within a cell and served by a radio base station covering said cell, wherein the cell is identifiable by means of a cell Geographical Area Information, GAI, comprising:

means for associating the cell portion being a portion of the cell wherein the mobile terminal is located with a Cell Portion GAI; and

means for transmitting said Cell Portion GAI to the connection controlling radio network controlling unit that controls the connection of said radio base station to the mobile station, wherein the cell portion is covered by one antenna beam transmitted from said radio base station, wherein the cell portion is identifiable by identification of the antenna beam and each antenna beam covering a respective cell portion is

distinguished by means of a phase reference provided by a pilot channel or by a downlink dedicated physical channel comprising dedicated pilots.